

S12/3275 S12/3278

South Kesteven District Council
Development Services

RECEIVED

30 - 01 - 2013

Light Commercial

The light commercial range
The most advanced systems for the professionals.



Light Commercial

Solutions for professionals, from professionals

Toshiba Digital and Super Digital Inverter systems deliver exceptional operating savings in extremely compact units.

With state-of-the-art technologies, flexible controls and improved installation they bring comfort and convenience to any business installation.

A complete range of indoor units satisfies all commercial applications: ceiling, cassette, ducted, suspended, high-wall and flexi units.

The enlargement of the range with maximum cooling capacities up to 27 kW allows to address even more commercial applications with larger volumes.

When the inverter becomes digital

The technology of the Digital Inverter control module ensures optimised reproduction of the supply sine wave at the desired frequency, in order to reduce inefficient harmonics that inverters normally emit.

With this innovative control method, the Toshiba Digital Inverter brings state-of-the-art inverter technology to the commercial sector, offering considerable advantages in terms of capacity, energy savings and optimised comfort.

The compressor operation is practically imperceptible.

Who says that you must choose between improved performance and minimised consumption?

The Toshiba Digital and Super Digital Inverters systems are powerful and extremely efficient.

They provide air conditioning with great energy savings.

The new series 4 of Super Digital Inverter provides the best efficiency performance in the industry: up to 4,52 EER in cooling mode and up to 4,79 COP in heating mode.

In most applications, these systems can reduce energy consumption by up to 50% compared with traditional fixed speed units.

The variable capacity management of the compressor allows the Digital and Super Digital Inverter to maintain room temperature control and to ensure minimum energy wastage.

The new series Super Digital Inverter 4 and Digital Inverter 3 can fit R22 or R407C old pipes in case of replacement of high-consuming fixed speed systems.



Absolute ease-of-installation

Superior compactness and capacity

Maximised operating economy

Total unit control



All the flexibility you have ever dreamt of

If you want high performance, compact units and optimum comfort, Toshiba has the ideal product for your requirements.

With the continuous improvement of the inverter control system, Toshiba offers vector control for its DC hybrid inverter, which enhances system efficiency and reduces noise levels in the power lines.

The new developments in electronics have been complemented by compressor innovation.

High-tech elements include improved coils, high precision components and higher refrigerant compression thanks to redesigned compression channels.

The new technology applied to Super Digital Inverter series 4 is able to satisfy applications that require cooling at low operating conditions down to -15°C .

Powerful heating capacities are possible at -20°C outdoor temperature.

The enhanced Eco-driving DC twin-rotary compressor delivers stable performance with extremely low rotor friction, making it ideal for noise-sensitive applications as well as for efficient operations in partial load conditions.



R-410A HEAT PUMPS

VECTOR IPDU INVERTER

HIGH PERFORMANCE



Digital Inverter 3 Outdoor unit

Performing EER

Light and compact: easy to install

Compatible with a wide range of indoor units

Features

Toshiba Digital Inverter 3 is an advanced solution that can meet the growing market need for ease of installation and increased consumer comfort. This new system, which uses the environmentally friendly refrigerant R410A, can use piping designed for old R22 or R407C refrigerants. This new solution enables old high-energy consumption air conditioning systems to be replaced by the most advanced inverter units, with significant benefits in terms of performance, acoustic comfort and energy-efficiency.

Key features

Extremely light and compact condensing units: easy to install in small spaces.

Excellent EER with significant savings in annual power consumption.

Compatible with a wide choice of indoor units: ceiling, 4-way cassette, compact 4-way cassette, ducted, high-wall and flexi units.

The Vector Intelligent Drive Unit (IPDU) technology ensures high performance.

Simplified maintenance using the new TCC-Link wired remote control panel.



Single phase

Physical data outdoor unit

Outdoor unit			RAV-SM563AT-E 2 HP	RAV-SM803AT-E 3 HP	RAV-SM1103AT-E 4 HP	RAV-SM1403AT-E 5 HP	RAV-SM1603AT-E 6 HP
Air Flow	m ³ /h – l/s		2400 - 667	2700 - 750	4500 - 1250	4500 - 1250	6180 - 1717
Sound pressure level	dB(A)	CO	46	48	53	54	51
Sound power level	dB(A)	CO	63	65	70	71	68
Operating range	°C	CO	-15 / +43	-15 / +43	-15 / +43	-15 / +43	-15 / +43
Sound pressure level	dB(A)	HP	48	50	54	54	53
Sound power level	dB(A)	HP	65	67	71	71	70
Operating range	°C	HP	-15 / +15	-15 / +15	-15 / +15	-15 / +15	-15 / +15
Dimensions (HxWxD)	mm		550 x 780 x 290	550 x 780 x 290	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320
Weight	kg		38	44	77	77	99
Compressor type			DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary	DC Twin Rotary
Flare connections							
Gas	in		1/2	5/8	5/8	5/8	5/8
Liquid	in		1/4	3/8	3/8	3/8	3/8
Minimum pipe length	m		5	5	5	5	5
Maximum pipe length	m		30	30	50	50	50
Maximum height difference	m		30	30	30	30	30
Chargeless pipe length	m		20	20	30	30	30
Power supply	V-ph-Hz		220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50	220/240-1-50

CO = cooling mode
HP = heating mode

R-410A HEAT PUMPS
INVERTER DRIVEN
HIGH CAPACITY


Big Digital Inverter Outdoor Unit

Compact outdoor unit
Extended operation range
High EER and COP

Features

The new Big DI inverter proposes an alternative cost competitive solution for medium size applications like shop and small office buildings.

The big DI system is the ideal solution in case of a large volume with single temperature control as it allows simultaneous operation of 2, 3 or up to 4 identical indoor units.

Toshiba concentrates a set of new high technologies in one unit, to deliver a top COP and EER* together with big capacity, still offering a very compact and flexible installation; through extensive piping run and a wide range of indoor units connection (please refer to page 32). Thanks to an extended operation range, the big DI allows comfortable environment throughout the whole year.

Key features

Cost competitive solution for high capacity applications of up to 27 kW** cooling, concentrated in only 0.29 m² footprint.

High-tech concentration (new twin rotary DC compressor, DC fan motor combined to a new propeller fan, vector controlled inverter and a 3-row heat exchanger) allowing to achieve Top energy class up to a EER of 3.21 and a COP of 3.85*

Wide operation range down to -20 °C in heating mode, down to -15 °C and up to 46 °C in cooling mode.

Long piping run up to 70 m total length and 30 m elevation.

Reuse of existing R22 and R407C piping capability.



*20 kW in 4 way-cassette twin combination

**Maximum cooling capacity for RAV-SM2804AT8-E

Three phase

Physical data outdoor unit

Outdoor unit			RAV-SM2244AT8-E	RAV-SM2804AT8-E
			8 HP	10 HP
Air Flow	m ³ /h - l/s		8000 - 2222	9000 - 2500
Sound pressure level	dB(A)	CO	56	57
Sound power level	dB(A)	CO	72	74
Operating range	°C	CO	-15 / +46	-15 / +46
Sound pressure level	dB(A)	HP	57	58
Sound power level	dB(A)	HP	74	75
Operating range	°C	HP	-20 / +15	-20 / +15
Dimensions (HxWxD)	mm		1540 x 900 x 320	1540 x 900 x 320
Weight	kg		134	134
Compressor type			DC Twin Rotary	DC Twin Rotary
Flare connections				
Gas	in		1 1/8	1 1/8
Liquid	in		1/2	1/2
Minimum pipe length	m		7,5	7,5
Maximum pipe length	m		70	70
Maximum height difference	m		30	30
Chargeless pipe length	m		30	30
Power supply	V-ph-Hz		380/415-3N-50	380/415-3N-50

CO = cooling mode
HP = heating mode



R-410A HEAT PUMPS

**DIGITAL/SUPER DIGITAL
INVERTER**

NEW DESIGN CEILING PANEL

Uniform air distribution

Light and easy to install

Three different setting modes

SM_UT **New 4-way cassette**

Features

This new 4-way cassette is unobtrusive and flexible and can easily blend in with any room interior.

Thanks to the new ceiling panel, it grants uniform air distribution, providing total comfort. This system is ideal for small commercial applications.

Key features

Two louver shape options: straight flow louver and wide flow louver; optimum air distribution.

Light-weight unit, for easy and quick installation.

Built-in drain pump.

Simple maintenance, thanks to the Self-cleaning function and the Ag-ion tip for anti-mould in drain cap.

Individual setting of louver position:
3 different Swing modes: standard, diagonally opposite, turn-around.

Optional wired remote control RBC-AX31U(W)-E.

Performance data with Super Digital Inverter Serie 4

Outdoor unit		RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1104AT8-E	RAV-SP1404AT-E	RAV-SP1404AT8-E	RAV-SP1604AT8-E
Indoor unit (Cassette)		RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Cooling capacity	kW	5,3	7,1	10,0	10,0	12,5	12,5	14,0
Cooling range (min. - max.)	kW	1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0	2,6 - 16,0
Power input (min. - rated - max.)	kW CO	0,20 - 1,47 - 1,95	0,30 - 1,86 - 2,52	0,64 - 2,21 - 3,88	0,66 - 2,37 - 3,60	0,64 - 3,16 - 4,21	0,66 - 3,46 - 4,40	0,66 - 4,49 - 5,70
EER		3,61	3,82	4,52	4,22	3,96	3,61	3,12
Energy efficiency class	CO	A	A	A	A	-	-	-
Annual energy consumption	kWh	735	930	1105	1185	1580	1730	2245
Heating capacity	kW	5,6	8,0	11,2	11,2	14,0	14,0	16,0
Heating range (min. - max.)	kW	0,9 - 8,1	1,3 - 11,3	2,4 - 13,0	2,4 - 15,6	2,4 - 16,5	2,4 - 18,0	2,4 - 19,0
Power input (min. - rated - max.)	kW HP	0,15 - 1,21 - 2,40	0,25 - 1,91 - 3,52	0,52 - 2,34 - 3,75	0,53 - 2,42 - 4,30	0,52 - 3,21 - 4,50	0,53 - 3,42 - 5,50	0,53 - 4,30 - 6,51
COP		4,63	4,19	4,79	4,63	4,36	4,09	3,72
Energy efficiency class	HP	A	A	A	A	-	-	-

Performance data with Digital Inverter Serie 3

Outdoor unit		RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E	RAV-SM1403AT-E	RAV-SM1603AT-E
Indoor unit (4-way Cassette)		RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Cooling capacity	kW	5,3	6,7	10,0	12,0	14,0
Cooling range (min. - max.)	kW	1,5 - 5,6	1,5 - 8,0	3,0 - 11,2	3,0 - 13,2	3,0 - 16,0
Power input (min. - rated - max.)	kW CO	0,35 - 1,65 - 1,86	0,45 - 2,09 - 2,60	0,60 - 3,11 - 4,10	0,65 - 3,74 - 4,50	0,65 - 4,49 - 5,70
EER		3,21	3,21	3,22	3,21	3,12
Energy efficiency class	CO	A	A	A	A	-
Annual energy consumption	kWh	825	1045	1555	1870	2245
Heating capacity	kW	5,6	8,0	11,2	14,0	16,0
Heating range (min. - max.)	kW	1,5 - 6,3	1,5 - 9,0	3,0 - 13,0	3,0 - 16,0	3,0 - 18,0
Power input (min. - rated - max.)	kW HP	0,35 - 1,44 - 2,08	0,45 - 2,21 - 3,03	0,60 - 2,93 - 4,30	0,65 - 3,80 - 4,50	0,65 - 4,43 - 6,51
COP		3,89	3,62	3,82	3,68	3,61
Energy efficiency class	HP	A	A	A	A	-

Physical data indoor unit

Indoor unit		RAV-SM564UT-E	RAV-SM804UT-E	RAV-SM1104UT-E	RAV-SM1404UT-E	RAV-SM1604UT-E
Air Flow (H/L)	m ³ /h - l/s	1050/780 - 291/217	1230/810 - 341/225	2010/1170 - 558/325	2100/1230 - 583/341	2130/1260 - 592/350
Sound pressure level (H-M-L)	dB(A)	32-29-28	35-31-28	43-38-33	44-38-34	45-40-36
Sound power level (H-M-L)	dB(A)	47-44-43	50-46-43	58-53-48	59-53-49	60-55-51
Dimensions (HxWxD)	mm	256 × 840 × 840	256 × 840 × 840	319 × 840 × 840	319 × 840 × 840	319 × 840 × 840
Weight	kg	20	20	24	24	24
Panel dimensions (HxWxD)	mm	30×950×950	30×950×950	30×950×950	30×950×950	30×950×950
Panel weight	kg	4,2	4,2	4,2	4,2	4,2

CO = cooling mode

H = heating mode

H-M-L = High - Medium - Low speed



R-410A HEAT PUMPS

**DIGITAL/SUPER DIGITAL
INVERTER**

COMPACT DIMENSIONS

Suitable for standard grid

**Easy installation and
maintenance**

Slim and unobtrusive design

SM_MUT **Compact 4-way cassette**

Features

This 4-way cassette has been designed to suit all standard 600 × 600 mm grid ceilings, for easy installation and maintenance.

Its compact design blends with any room interior, where appearance is as important as functionality.

Draught prevention and clean ceiling functions make this unit ideal for the most demanding applications.

When combined with the Super Digital Inverter outdoor unit, the highest energy label (A) is achieved.

Key features

Slim-line dimensions: this cassette is suitable for the most demanding installations where ceiling height is reduced.

Same dimensions for all capacities: the installation is always smart and elegant.

Easy maintenance: ease of access to the corner pockets facilitates installation and adjustment for perfect ceiling fitting.

Easy installation with a built-in drain pump.

TCC Link control panel makes control of the system flexible and simplifies maintenance.

Performance data with Super Digital Inverter Serie 4

Outdoor unit			RAV-SP404AT-E	RAV-SP454AT-E	RAV-SP564AT-E
Indoor unit (600X600 Cassette)			RAV-SM404MUT-E	RAV-SM454MUT-E	RAV-SM564MUT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	CO	0,36 - 1,00 - 1,49	0,36 - 1,19 - 1,49	0,21 - 1,56 - 2,29
EER	W/W		3,60	3,36	3,21
Energy efficiency class		CO	A	A	A
Annual energy consumption	kWh		500	595	780
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	HP	0,36 - 0,97 - 2,20	0,36 - 1,16 - 2,30	0,17 - 1,54 - 2,37
COP	W/W		4,12	3,88	3,64
Energy efficiency class		HP	A	A	A

Performance data with Digital Inverter Serie 3

Outdoor unit			RAV-SM563AT-E
Indoor unit (600X600 Cassette)			RAV-SM564MUT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input	kW	CO	0,40 - 1,61 - 1,86
EER	W/W		3,11
Energy efficiency class		CO	B
Annual energy consumption	kWh		805
Heating capacity	kW		5,6
Heating range (min. - max.)	kW		1,5 - 6,3
Power input	kW	HP	0,40 - 1,61 - 2,40
COP	W/W		3,48
Energy efficiency class		HP	B

Physical data indoor unit

Indoor unit		RAV-SM404MUT-E	RAV-SM454MUT-E	RAV-SM564MUT-E
Air Flow (H/L)	m ³ /h - l/s	660/468 - 183/130	660/468 - 183/130	798/546 - 222/152
Sound pressure level (H-M-L)	dB(A)	40-36-31	40-36-31	43-39-34
Sound power level (H-M-L)	dB(A)	55-51-46	55-51-46	58-54-49
Dimensions (HxWxD)	mm	268 x 575 x 575	268 x 575 x 575	268 x 575 x 575
Weight	kg	17	17	17
Panel dimensions (HxWxD)	mm	27 x 700 x 700	27 x 700 x 700	27 x 700 x 700
Panel weight	kg	3	3	3

CO = cooling mode
HP = heating mode

H-M-L = High - Medium - Low speed



R-410A HEAT PUMPS

**DIGITAL/SUPER DIGITAL
INVERTER**

DISCREET DUCTED UNITS

SM_BT Ducted

Features

Whatever the shape of the room could be, ducted units ensure uniform temperatures in it.

The unit can be discreetly positioned in the walls or ceiling.

It's ideal for hotels, banks and similar applications, where very low noise levels are needed.

Key features

Wide range of applications: the use of ducts ensures flexible installations.

Improved room aesthetic: it's unobtrusive and discreet.

High static pressure: 98 Pa can be achieved and all the areas of the room can have the same temperature simultaneously.

High-lift drain pump kit: raises drain up to 290 mm for flexible condensate piping layout.

Infra-red control option

Discharge spigots as standard

High static pressure up to 98 Pa

Performance data with Super Digital Inverter Serie 4

Outdoor unit		RAV-SP564AT-E	RAV-SP804AT-E	RAV-SP1104AT-E	RAV-SP1104AT8-E	RAV-SP1404AT-E	RAV-SP1404AT8-E
Indoor unit (Standard Duct)		RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E	RAV-SM1404BT-E
Cooling capacity	kW	5,0	7,1	10,0	10,0	12,5	12,5
Cooling range (min. - max.)	kW	1,2 - 5,6	1,9 - 8,0	2,6 - 12,0	2,6 - 12,0	2,6 - 14,0	2,6 - 14,0
Power input (min. - rated - max.)	kW CO	0,21 - 1,56 - 2,05	0,30 - 2,21 - 2,88	0,64 - 2,94 - 3,80	0,66 - 2,94 - 4,01	0,64 - 3,83 - 4,47	0,66 - 3,86 - 4,89
EER		3,21	3,21	3,40	3,40	3,26	3,24
Energy efficiency class	CO	A	A	A	A	-	-
Annual energy consumption	kWh	780	1105	1470	1470	1915	1930
Heating capacity	kW	5,6	8,0	11,2	11,2	14,0	14,0
Heating range (min. - max.)	kW	0,9 - 7,4	1,3 - 10,6	2,4 - 13,0	2,40 - 14,0	2,4 - 16,5	2,40 - 18,0
Power input (min. - rated - max.)	kW HP	0,17 - 1,55 - 2,51	0,27 - 2,21 - 3,50	0,52 - 2,77 - 4,00	0,53 - 2,77 - 4,42	0,52 - 3,41 - 4,50	0,53 - 3,55 - 5,71
COP		3,61	3,62	4,04	4,04	4,11	3,94
Energy efficiency class	HP	A	A	A	A	-	-

Performance data with Digital Inverter Serie 3

Outdoor unit		RAV-SM563AT-E	RAV-SM803AT-E	RAV-SM1103AT-E	RAV-SM1403AT-E
Indoor unit (Standard Duct)		RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E
Cooling capacity	kW	5,0	7,1	10,0	12,5
Cooling range (min. - max.)	kW	1,5 - 5,6	1,5 - 7,4	3,0 - 12,5	3,0 - 13,2
Power input (min. - rated - max.)	kW CO	0,45 - 1,78 - 1,95	0,50 - 2,53 - 2,76	0,60 - 3,56 - 4,50	0,65 - 4,42 - 4,85
EER		2,81	2,81	2,81	2,83
Energy efficiency class	CO	C	C	C	-
Annual energy consumption	kWh	890	1265	1780	2210
Heating capacity	kW	5,6	8,0	11,2	14,0
Heating range (min. - max.)	kW	1,5 - 6,3	1,5 - 9,0	3,0 - 12,5	3,0 - 16,0
Power input (min. - rated - max.)	kW HP	0,45 - 1,71 - 2,47	0,50 - 2,41 - 3,18	0,60 - 3,14 - 4,00	0,65 - 4,03 - 4,55
COP		3,27	3,32	3,57	3,47
Energy efficiency class	HP	C	C	B	-

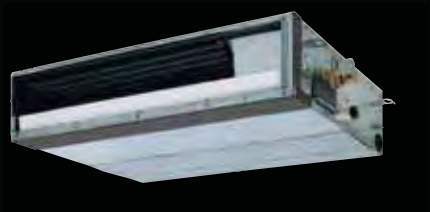
Physical data indoor unit

Indoor unit		RAV-SM564BT-E	RAV-SM804BT-E	RAV-SM1104BT-E	RAV-SM1404BT-E
Air Flow (H/L)	m ³ /h – l/s	780/588 - 217/163	1140/798 - 317/222	1620/1134 - 450/315	1980/1386 - 550/385
Sound pressure level (H-M-L)	dB(A)	40-37-33	40-37-34	42-39-36	44-41-38
Sound power level (H-M-L)	dB(A)	55-52-48	55-52-49	57-54-51	59-56-53
Dimensions (HxWxD)	mm	320 x 700 x 800	320 x 1000 x 800	320 x 1350 x 800	320 x 1350 x 800
Weight	kg	30	39	54	54
External static pressure (stand/upper limit)	Pa	40/100	40/100	40/100	40/90

CO = cooling mode

HP = heating mode

H-M-L = High - Medium - Low speed



R-410A HEAT PUMPS

**DIGITAL/SUPER DIGITAL
INVERTER**

1,5 – 2 HP RANGE

Slim profile

Self cleaning

SM_SDT Slim Duct

Features

Very compact design unit with low height dimension for flexible ceiling installations. Combines with the new small sizes of the high performances Super Digital Inverter outdoor units, for commercial applications which require limited power (1,5 HP).

Key features

High energy efficiency performances in cooling and heating.

Two choice of selection for the air inlet section: bottom or back side.

Natural drain discharge port and drain pump (up to 850 mm).

Easy to install and service.

Cleanable prefilter included.

Fresh air inlet possibility via a pre-punched knock hole.

Performance data with Super Digital Inverter Serie 4

Outdoor unit			RAV-SP404AT-E	RAV-SP454AT-E	RAV-SP564AT-E
Indoor unit (Slim duct)			RAV-SM404SDT-E	RAV-SM454SDT-E	RAV-SM564SDT-E
Cooling capacity	kW		3,6	4,0	5,0
Cooling range (min. - max.)	kW		1,5 - 4,0	1,5 - 4,5	1,2 - 5,6
Power input (min. - rated - max.)	kW	CO	0,37 - 1,03 - 1,25	0,37 - 1,2 - 1,49	0,21 - 1,56 - 2,29
EER	W/W		3,50	3,33	3,21
Energy efficiency class		CO	A	A	A
Annual energy consumption	kWh		515	600	780
Heating capacity	kW		4,0	4,5	5,6
Heating range (min. - max.)	kW		1,5 - 5,0	1,5 - 5,6	0,9 - 7,4
Power input (min. - rated - max.)	kW	HP	0,37 - 1,00 - 2,20	0,37 - 1,15 - 2,30	0,17 - 1,44 - 2,37
COP	W/W		4,00	3,91	3,89
Energy efficiency class		HP	A	A	A

Performance data with Digital Inverter Serie 3

Outdoor unit			RAV-SM563AT-E
Indoor unit (Slim duct)			RAV-SM564SDT-E
Cooling capacity	kW		5,0
Cooling range (min. - max.)	kW		1,5 - 5,6
Power input (min. - rated - max.)	kW	CO	0,21 - 1,66 - 2,78
EER	W/W		3,01
Energy efficiency class		CO	B
Annual energy consumption	kWh		830
Heating capacity	kW		5,6
Heating range (min. - max.)	kW		1,5 - 6,3
Power input (min. - rated - max.)	kW	HP	0,38 - 1,59 - 2,40
COP	W/W		3,52
Energy efficiency class		HP	B

Physical data indoor unit

Indoor unit		RAV-SM404SDT-E	RAV-SM454SDT-E	RAV-SM564SDT-E
Air Flow (H/L)	m ³ /h – l/s	690/522 - 192/145	690/522 - 192/145	780/582 - 217/162
Sound pressure level (H-M-L)*	dB(A)	39-36-33	39-36-33	45-40-36
Sound power level (H-M-L)*	dB(A)	54-51-48	54-51-48	60-55-51
Dimensions (HxWxD)	mm	210 x 845 x 645	210 x 845 x 645	210 x 845 x 645
Weight	kg	22	22	22
External static pressure (stand/upper limit)	Pa	5/24	5/24	4/24

CO = cooling mode

HP = heating mode

*bottom air inlet



R-410A HEAT PUMPS

**DIGITAL/SUPER DIGITAL
INVERTER**

DRAIN PUMP KIT

Easy service and installation

High efficiency filters

Up to 196 Pa

Wide range of options

SM_DT **Hi-static pressure ducted unit**

Features

This is Toshiba's most powerful ducted unit delivering air flows up to 5040 m³/h. Unobtrusive, flexible and compact, it can be installed easily and discretely in any interior.

This model is the ideal solution for both new and refurbishing buildings.

Key features

Easy installation.

Inspection hole enables easy access and maintenance.

Wide range of options available: filter chamber, long-life filter, drain pump kit, etc.

Static pressure can be set to 3 levels (68,6, 137 and 196 Pa).

Performance data with Big DI serie 4

Outdoor unit			RAV-SM2244AT8-E	RAV-SM2804AT8-E
Indoor unit (High Static duct)			RAV-SM2242DT-E	RAV-SM2802DT-E
Cooling capacity	kW		20,0	23,0
Cooling range (min. - max.)	kW		9,8 - 22,4	9,8 - 27,0
Power input (min. - rated - max.)	kW	CO	3,26 - 7,20 - 9,09	3,36 - 8,75 - 12,76
EER	W/W		2,78	2,63
Energy efficiency class		CO	-	-
Annual energy consumption	kWh		3600	4375
Heating capacity	kW		22,4	27,0
Heating range (min. - max.)	kW		9,8 - 25,0	9,8 - 31,5
Power input (min. - rated - max.)	kW	HP	2,57 - 6,49 - 7,45	2,57 - 8,15 - 11,01
COP	W/W		3,45	3,31
Energy efficiency class		HP	-	-

Physical data indoor unit

Indoor unit			RAV-SM2242DT-E	RAV-SM2802DT-E
Air Flow (H/L)	m ³ /h – l/s		3600 - 1000	4200 - 1167
Sound pressure level	dB(A)		54	55
Sound power level	dB(A)		74	75
Dimensions (HxWxD)	mm		470 x 1380 x 1250	470 x 1380 x 1250
Weight	kg		160	160
External static pressure (H/M/L)	Pa		196/137/68,6	196/137/68,6

CO = cooling mode

HP = heating mode

H-M-L = High - Medium - Low speed